31 October 2023

Ministry of Business, Innovation and Employment
15 Stout Street
PO Box 1473, Wellington 6140
Attention: Offshore Renewable Energy Submissions
By Email: offshorerenewables@mbie.govt.nz

Tēnā koe

Thank you for the opportunity to provide feedback on approaches to developing a regulatory framework for offshore reneable energy.

A strong theme of our feedback is to ensure that supporting Port infrastructure, that must be developed well in advance of the first offshore renewable energy project, is able to secure the necessary funding to make it happen.

Ports supporting the construction, operations, and maintenance of offshore wind farms need to start developing infrstructure now to be ready for initial offshore renewabel development in 2030. Currently there are no confirmed regulations supporting the sector and there are no commercial agreements in place with developers to support early stage investment. This and the ability to quickly gain consents to support Port investment and development are the key messages that we are asking the government to address.

We would be pleased to discuss any aspects of our submission with you.

Submission on approaches to managing feasibility activities

Name	
Organisation (if applicable)	Port Taranaki Limited
Contact details	

Release of information

Please let us know if you would like any part of your submission to be kept confidential.

☒ I would like to be contacted before the release or use of my submission in the summary of submissions that will be published by MBIE after the consultation.

☐ I would like my submission (or identified parts of my submission) to be kept confidential, and **have stated below** my reasons and grounds under the Official Information Act that I believe apply, for consideration by MBIE.

I would like my submission (or identified parts of my submission) to be kept confidential because…
[Insert text]

[To check the boxes above: Double click on box, then select 'checked']

PORT INFRASTRUCTURE

Offshore renewable energy projects, particularly offshore wind, require access to suitable port infrastructure. The size of component parts combined with the importance, from a health and safety and cost perspective, of carrying out as much work onshore as possible means that this port infrastructure needs to be meet certain specifications, including being of a sufficient size.

We understand that, for offshore wind projects to go ahead in New Zealand, material upgrades to port infrastructure would be required. We are interested in hearing from stakeholders on the scale, type and cost of upgrades that might be needed; what role port owners and operators might play; and in any changes that might be needed to improve the delivery of port infrastructure upgrades.

Questions for consultation

27. What changes might be needed in order to deliver the types of port infrastructure upgrades needed to support offshore renewables?

Port Taranaki Response

To deliver the necessary port infrastructure upgrades to support offshore wind development, various changes and investments will be required. These upgrades are essential to accommodate the offshore wind industry and will play a crucial role in securing local contracts to support the development, construction, and operations of the proposed offshore wind farms. Port development will be the catalyst for local businesses input into the OSW sector. Ports are the intersection between New Zealand product contribution and the OSW components located in the marine environment.

A priority of the regulatory framework must be to establish a sector collaboration framework focussed on building confidence amongst Ports so that required investment is brought forward in time. To meet OSW developers timelines for OSW construction to begin in the early 2030's Ports must start investing in infrastructure projects today to be ready on time. Failure to achieve early investment confidence could see Port development delayed. A lack of ambition and target setting by government could see OSW developers look elsewhere if supporting infrastructure cannot be developed on time. The status quo will not deliver the value that New Zealand needs.

The Scale of Development Required

Quay and Berth Improvements:

Existing quays and berths will need to be strengthened and modified to handle the heavy equipment and materials required for offshore wind projects. Wharf structures will need to support up to 40 tonnes per square metre. This is substantially more than Port Taranaki's existing wharf capability.

Specialized Equipment:

Ports and/or Port Operators will need to invest in and have available specialized equipment such as heavy-duty cranes, transport trailers, and blade handling facilities to efficiently handle wind turbine components. The weights of components are order of magnitude greater than current lifting capability at New Zealand Ports.

Storage laydown areas and warehousing:

Enhanced storage and warehousing facilities are needed to accommodate the components of wind turbines, including blades, nacelles, towers, and foundations. The sizes of the components are significant.

Assuming 500 megawatts of bottom fixed offshore wind construction per annum

Quayside (outbound) 4 hectares of space is required to handle foundations and wind turbines.

Quayside (inbound) 3 hectares of space is required to handle foundations and wind turbines. Quay baring capacity would need to be circa 40 tonnes per square metre.

Hinterland storage area 12 hectares to store all components prior to marshalling and dispatch to the offshore construction site.

Ports will need to make existing space available and develop new areas (possible reclamations) to meet these requirements.

Ports will need to reconfigure existing customer storage requirements including developing inland Ports to meet the storage needs of existing customers displaced by offshore wind storage.

Note that the above analysis relates to fixed bottom offshore wind farms. Should the Port need to develop to support the construction of floating offshore wind farms there would be additional and different requirements that the Port would need to meet.

Capital costs of Port Development – Indicative high level estimates

Estimated cost to strengthen and make an existing wharf suitable: $US78 million.

Estimated cost to develop port hinterland for OSW laydown and storage: $US135 million

Estimated cost of reclamation land, berthage and quayside laydown area: $US200 million.

Changes required to improve the delivery of Port Infrastructure Upgrades

Permitting and Regulatory Streamlining:

Streamline the permitting process to expedite the necessary regulatory approvals for port infrastructure upgrades, minimizing delays. It currently takes 6-8 years to consent significant Port developments. This is evidenced by recent and current consenting processes at the Port of Napier, Port of Tauranga, Port of Lyttleton, and North Port. All significant Port upgrades plagued by consenting delays.

Iwi/Hapu Engagement

Work collaboratively and in partnership with Iwi/Hapu to ensure early engagement that optimises Port development. At a national level there must be an equitable sharing of benefits from the Offshore Wind Sector back to the regions that are supporting the development of nationally significant infrastructure for New Zealand Inc. This includes benefit sharing back to the mana whenua of the land supporting OSW projects.

Workforce Training:

Provide training programs to ensure the local workforce is equipped with the necessary skills to support offshore wind operations, maintenance, and construction.

Collaboration and Partnerships:

Foster collaboration between port authorities, OSW developers, government agencies, and private sector companies to facilitate investments in port infrastructure and share the financial burden.

Offshore Wind Cluster Development:

Encourage the establishment of offshore wind clusters near ports to create synergies among industry players, such as manufacturers, service providers, and research institutions.

Funding Mechanisms:

Explore innovative financing options, such as public-private partnerships, subsidies, and grants, to fund port infrastructure upgrades for offshore wind projects. Explore innovative funding options to help Ports navigate through that period of uncertainty between;

- **a-** The need to invest now to be ready on time and
- **b-** A point in the future when
    - **a.** Government regulations are in place
    - **b.** OSW developers have been awarded permits
    - **c.** OSW developers are entering commercial relationships with Ports to support their projects.

These changes and investments are crucial for facilitating the growth of offshore wind energy and ensuring that ports can meet the demands of this new industry in a timely fashion. Ports will play a vital role in the development of the sector. No offshore wind development has taken place without the support of a Port.